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Total Enclosures: 2



Safety Data Sheet

Version number: 10.7
SDS# R6902

2021-03-16

SECTION 1: Identification

1.1 Product identifier

Trade name	R-6902 Ampoules, K-6903 Ampoules, R-6904 Ampoules, R-6905 Ampoules, R6909 Ampoules, K-6913 Ampoules, K-6923 Ampoules, K-6933 Ampoules, R-7002, R-7002A, R-7002B, R-7002C, R-7002D, K-7003 Ampoules
Other means of identification	Nitrate CHEMets® & Vacu-vials® Ampoules, Nitrite CHEMets® & VACUettes® Refills and Vacu-vials® Ampoules

1.2 Relevant identified uses of the substance or mixture and uses advised against

Component of water analysis test kits:	K-6903, K-6904, K-6905, K-6909A, K-6909B, K-6909C, K-6909D, K-6913, K-6923, K-6933, K-7003, K-7004, K-7004A, K-7004B, K-7004C, K-7004D
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1.3 Details of the supplier of the safety data sheet

CHEMetrics, Inc.
4295 Catlett Road
Midland VA 22728
United States

Telephone: 1-540-788-9026
Telefax: 1-540-788-4856
e-mail: technical@chemetrics.com
Website: www.chemetrics.com

1.4 Emergency telephone number

Emergency information service	ChemTel Inc.: 1-800-255-3924, +01-813-248-0585
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SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

This mixture does not meet the criteria for classification.

Section	Hazard class	Category	Hazard class and category	Hazard statement
3.2	skin corrosion/irritation	3	Skin Irrit. 3	H316

R-6902 Ampoules, K-6903 Ampoules, R-6904 Ampoules, R-6905 Ampoules, R6909 Ampoules, K-6913 Ampoules, K-6923 Ampoules, K-6933

Ampoules, R-7002, R-7002A, R-7002B, R-7002C, R-7002D, K-7003 Ampoules

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word not required
- Pictograms not required
- Hazard statements
H316 Causes mild skin irritation.
- Precautionary statements
P332+P313 If skin irritation occurs: Get medical advice/attention.





SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)


3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
water	CAS No 7732-18-5	≥ 81		
ethylene glycol	CAS No 107-21-1	10	Acute Tox. 4 / H302	
propan-2-ol	CAS No 67-63-0	3	Eye Irrit. 2 / H319 STOT SE 3 / H336 Flam. Liq. 2 / H225	
Sulfanilic acid sodium salt hydrate	CAS No 123333-70-0	2		
CDTA	CAS No 63451-33-2	≤ 1	Eye Irrit. 2B / H320	
Chromotropic acid disodium salt dihydrate	CAS No 5808-22-0	1		
Gentisic acid	CAS No 490-79-9	1	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335	
sodium borohydride	CAS No 16940-66-2	0.035	Acute Tox. 3 / H301 Acute Tox. 4 / H332 Skin Corr. 1C / H314 Eye Dam. 1 / H318 Repr. 1B / H360F Water-react. 1 / H260	

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Ampoules, R-7002, R-7002A, R-7002B, R-7002C, R-7002D, K-7003 Ampoules

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Sodium Cyanoborohydride	CAS No 25895-60-7	0.02	Acute Tox. 2 / H300 Acute Tox. 2 / H310 Acute Tox. 2 / H330 Skin Corr. 1B / H314 Eye Dam. 1 / H318 Flam. Sol. 2 / H228 Water-react. 2 / H261	

For full text of abbreviations: see SECTION 16.

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Wear impact- and splash-resistant eyewear. Break the ampoule tip only when it is completely immersed in sample. Breaking the tip in air may cause the glass ampoule to shatter.

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities**7.3 Other information**

For optimum analytical performance, store in the dark and at room temperature.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Notation	Source
US	ethylene glycol	107-21-1	REL							appx-D	NIOSH REL
US	ethylene glycol	107-21-1	TLV®				10			i, aerosol	ACGIH® 2019
US	ethylene glycol	107-21-1	PEL (CA)					40	100	vap	Cal/OSHA PEL
US	ethylene glycol	107-21-1	TLV®	25		50				vap	ACGIH® 2019
US	2-propanol	67-63-0	TLV®	200		400					ACGIH® 2019
US	isopropyl alcohol	67-63-0	PEL (CA)	400	980	500	1,225				Cal/OSHA PEL
US	isopropyl alcohol	67-63-0	REL	400 (10 h)	980 (10 h)	500	1,225				NIOSH REL
US	isopropyl alcohol	67-63-0	PEL	400	980						29 CFR 1910.1000

Notation

aerosol as aerosols

appx-D see Appendix D - Substances with No Established RELs

Ceiling-C ceiling value is a limit value above which exposure should not occur

i inhalable fraction

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

vap as vapors

Biological limit values						
Country	Name of agent	Parameter	Notation	Identifier	Value	Source
US	isopropanol	acetone		BEI®	40 mg/l	ACGIH® 2019

Relevant DNELs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
ethylene glycol	107-21-1	DNEL	35 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
ethylene glycol	107-21-1	DNEL	106 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
propan-2-ol	67-63-0	DNEL	500 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
propan-2-ol	67-63-0	DNEL	888 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant PNECs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
ethylene glycol	107-21-1	PNEC	10 mg/l	aquatic organisms	freshwater	short-term (single instance)
ethylene glycol	107-21-1	PNEC	1 mg/l	aquatic organisms	marine water	short-term (single instance)
ethylene glycol	107-21-1	PNEC	199.5 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
ethylene glycol	107-21-1	PNEC	37 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
ethylene glycol	107-21-1	PNEC	3.7 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
ethylene glycol	107-21-1	PNEC	1.53 mg/kg	terrestrial organisms	soil	short-term (single instance)
propan-2-ol	67-63-0	PNEC	140.9 mg/l	aquatic organisms	freshwater	short-term (single instance)
propan-2-ol	67-63-0	PNEC	140.9 mg/l	aquatic organisms	marine water	short-term (single instance)
propan-2-ol	67-63-0	PNEC	2,251 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
propan-2-ol	67-63-0	PNEC	552 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
propan-2-ol	67-63-0	PNEC	552 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
propan-2-ol	67-63-0	PNEC	28 mg/kg	terrestrial organisms	soil	short-term (single instance)
sodium borohydride	16940-66-2	PNEC	1.75 mg/l	aquatic organisms	freshwater	short-term (single instance)
sodium borohydride	16940-66-2	PNEC	1.75 mg/l	aquatic organisms	marine water	short-term (single instance)
sodium borohydride	16940-66-2	PNEC	54.77 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)

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Ampoules, R-7002, R-7002A, R-7002B, R-7002C, R-7002D, K-7003 Ampoules

Relevant PNECs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
sodium borohydride	16940-66-2	PNEC	2.55 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
sodium borohydride	16940-66-2	PNEC	0.255 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
sodium borohydride	16940-66-2	PNEC	4.8 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Product description CHEMets Refills: Sealed glass ampoules, 7 mm OD, for visual colorimetric water analysis. Each CHEMet™ ampoule contains approximately 0.2 - 0.5 mL of liquid reagent sealed under vacuum. Refills contain 30 ampoules, test kits contain 1 refill.

VACUettes Refills: Sealed glass ampoules, 7 mm OD, with small glass capillary attached, for visual colorimetric water analysis. Each VACUette™ ampoule contains approximately 0.2 - 0.5 mL of liquid reagent sealed under vacuum. Refills contain 30 ampoules, test kits contain 1 refill.

Vacu-vials Ampoules: Sealed glass ampoules, 13 mm OD, for instrumental colorimetric water analysis. Each Vacu-vial™ ampoule contains approximately 0.8 - 2 mL of liquid reagent sealed under vacuum. Test kits contain 30 ampoules.

R-6902 Ampoules, K-6903 Ampoules, R-6904 Ampoules, R-6905 Ampoules, R6909 Ampoules, K-6913 Ampoules, K-6923 Ampoules, K-6933

Ampoules, R-7002, R-7002A, R-7002B, R-7002C, R-7002D, K-7003 Ampoules

Appearance

Physical state	liquid
Color	brownish yellow to gold
Odor	odorless

Other safety parameters

pH (value)	3.5
Melting point/freezing point	-2 °C
Initial boiling point and boiling range	197.4 °C at 1,013 hPa
Flash point	not determined
Evaporation rate	Not determined
Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	100 Pa at 51.1 °C
Density	not determined
Vapor density	this information is not available
Relative density	1.01 (water = 1)

Solubility(ies)

- Water solubility	miscible in any proportion
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Partition coefficient

- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	412 °C
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

This mixture does not meet the criteria for classification.

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Gentisic acid	490-79-9	oral	800 mg/kg
sodium borohydride	16940-66-2	oral	56.57 mg/kg
sodium borohydride	16940-66-2	inhalation: dust/mist	1.295 mg/l/4h
Sodium Cyanoborohydride	25895-60-7	oral	5 mg/kg
Sodium Cyanoborohydride	25895-60-7	dermal	50 mg/kg
Sodium Cyanoborohydride	25895-60-7	inhalation: dust/mist	0.05 mg/l/4h

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans			
Name of substance	CAS No	Classification	Number
propan-2-ol	67-63-0	3	

Name of substance	CAS No	Classification	Number
propan-2-ol	67-63-0	3	

Legend

3 Not classifiable as to carcinogenicity in humans

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Information on this property is not available.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

please consider the relevant national or regional provisions

SECTION 14: Transport information**14.1 UN number**

not subject to transport regulations

14.2 UN proper shipping name**14.3 Transport hazard class(es)**

not assigned

14.4 Packing group

not assigned

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Other relevant information

Shipping container markings and labels, received from CHEMetrics, may vary from the above information. Products that are regulated for transport will be packaged by CHEMetrics as Dangerous Goods in Excepted Quantities according to IATA, US DOT, and IMDG regulations. CHEMetrics may also elect to ship certain products as UN 3316 Chemical Kit, Hazard Class 9, Packing Group II or III. In case of reshipping, it is the responsibility of the shipper to determine appropriate labels and markings in accordance with applicable transportation regulations.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations**Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information**

Not subject to transport regulations.

International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings			
Name of substance	CAS No	Remarks	Effective date
ethylene glycol	107-21-1		1986-12-31
propan-2-ol	67-63-0	only persons who manufacture by the strong acid process are subject, supplier notification not required	1986-12-31

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
ethylene glycol	107-21-1		3	5000 (2270)

Legend

3 "3" indicates that the source is section 112 of the Clean Air Act

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
sodium borohydride	16940-66-2		R1
ethylene glycol	107-21-1		
propan-2-ol	67-63-0		F3

Legend

F3 Flammable - Third Degree

R1 Reactive - First Degree

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Proposition 65 List of chemicals			
Name acc. to inventory	CAS No	Remarks	Type of the toxicity
ethylene glycol (ethanediol)	107-21-1		developmental

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	/	none
Health	0	no significant risk to health
Flammability	1	material that must be preheated before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	1	material that must be preheated before ignition can occur
Health	0	material that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National inventories

Country	Inventory	Status
US	TSCA	not all ingredients are listed
AU	AICS	not all ingredients are listed
CA	DSL	not all ingredients are listed
CA	NDSL	not all ingredients are listed
CN	IECSC	not all ingredients are listed
EU	ECSI	not all ingredients are listed

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Ampoules, R-7002, R-7002A, R-7002B, R-7002C, R-7002D, K-7003 Ampoules

Country	Inventory	Status
EU	REACH Reg.	not all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
KR	KECI	not all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	not all ingredients are listed
PH	PICCS	not all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed

Legend

AICS	Australian Inventory of Chemical Substances
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
ISHA-ENCS	Inventory of Existing and New Chemical Substances (ISHA-ENCS)
KECI	Korea Existing Chemicals Inventory
NDSL	Non-domestic Substances List (NDSL)
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H225	Highly flammable liquid and vapor.
H228	Flammable solid.
H260	In contact with water releases flammable gases, which may ignite spontaneously.
H261	In contact with water releases flammable gas.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H316	Causes mild skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H320	Causes eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360F	May damage fertility.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.



Safety Data Sheet

Version number: 12.0
SDS# S6900

2021-03-26

SECTION 1: Identification

1.1 Product identifier

Trade name **Cadmium Foil Packs for Nitrate CHEMetrics® Refills & Kits and Vacu-vials® Kits**

Other means of identification N/A

1.2 Relevant identified uses of the substance or mixture and uses advised against

Component of water analysis test kits: R-6902, K-6903, K-6904, R-6904, R-6909, K-6909A, K-6909B, K-6909C, K-6909D, K-6923, K-6933

1.3 Details of the supplier of the safety data sheet

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1.4 Emergency telephone number

Emergency information service ChemTel Inc.: 1-800-255-3924, +01-813-248-0585

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard statement
3.10	acute toxicity (oral)	5	Acute Tox. 5	H303
3.11	acute toxicity (inhal.)	3	Acute Tox. 3	H331
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.5	germ cell mutagenicity	2	Muta. 2	H341
3.6	carcinogenicity	1A	Carc. 1A	H350
3.7	reproductive toxicity	2	Repr. 2	H361fd
3.9	specific target organ toxicity - repeated exposure	1	STOT RE 1	H372

Section	Hazard class	Category	Hazard class and category	Hazard statement
4.1A	hazardous to the aquatic environment - acute hazard	1	Aquatic Acute 1	H400
4.1C	hazardous to the aquatic environment - chronic hazard	2	Aquatic Chronic 2	H411

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labeling

- Signal word danger

- Pictograms

GHS06, GHS08, GHS09



- Hazard statements

H303	May be harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

- Precautionary statements

P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P311	Call a POISON CENTER/doctor.
P321	Specific treatment (see on this label).
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to industrial combustion plant.







SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
(+)-tartaric acid	CAS No 87-69-4	30 – 40	Acute Tox. 4 / H302 Acute Tox. 5 / H313 Aquatic Acute 3 / H402	
Sodium sulphate	CAS No 7757-82-6	20 – 30	Acute Tox. 5 / H303 Acute Tox. 4 / H332	
cyclohexanediaminetetraacetic acid, trisodium salt	CAS No 36679-96-6	5 – 10	Skin Irrit. 2 / H315 Eye Irrit. 2A / H319	
cadmium (non-pyrophoric)	CAS No 7440-43-9	3 – 7	Acute Tox. 2 / H330 Muta. 2 / H341 Carc. 1B / H350 Repr. 2 / H361fd STOT RE 1 / H372 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	
CDTA Copper salt	CAS No 19332-78-6	≤ 1	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Aquatic Chronic 3 / H412	
Polyquaternium 15	CAS No 35429-19-7	≤ 0.1	Eye Irrit. 2 / H319	

For full text of abbreviations: see SECTION 16.

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Rinse skin with water/shower.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water, Foam, Alcohol resistant foam, ABC-powder

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Deposited combustible dust has considerable explosion potential.

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains, Take up mechanically

Advice on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Wear Impact- and splash-resistant eyewear.

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.

- Specific notes/details

Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Removal of dust deposits.

- Ventilation requirements

Keep any substance that emits harmful vapors or gases in a place that allows these to be permanently extracted. Use local and general ventilation.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Other information

For optimum analytical performance, store in the dark and at room temperature.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Notation	Source
US	particulates not otherwise classified		REL							appx-D	NIOSH REL
US	particulates not otherwise classified (PNOC)		PEL	1,766	15					i, dust	29 CFR 1910.1000
US	particulates not otherwise classified (PNOC)		PEL	529.5	5					partml, r, dust	29 CFR 1910.1000

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Notation	Source
US	Particulates not otherwise regulated		PEL (CA)		10					dust	Cal/OSHA PEL
US	Particulates not otherwise regulated		PEL (CA)		5					r	Cal/OSHA PEL
US	cadmium	7440-43-9	PEL		0.005						29 CFR 1910.1000
US	cadmium	7440-43-9	TLV®		0.01					Cd	ACGIH® 2019
US	cadmium	7440-43-9	PEL (CA)		0.005					dust, Cd	Cal/OSHA PEL
US	cadmium	7440-43-9	REL							dust, Cd, appx-A, lowest	NIOSH REL
US	cadmium	7440-43-9	PEL		0.3				0.6	dust, us-pel-z2b	29 CFR 1910.1000
US	cadmium	7440-43-9	PEL		0.1				0.3	fume, us-pel-z2b	29 CFR 1910.1000
US	cadmium	7440-43-9	TLV®		0.002					r, Cd	ACGIH® 2019

Notation

appx-A NIOSH Potential Occupational Carcinogen (Appendix A)

appx-D see Appendix D - Substances with No Established RELs

Cd calculated as Cd (cadmium)

Ceiling-C ceiling value is a limit value above which exposure should not occur

dust as dust

fume as fume

i inhalable fraction

lowest exposure by all routes should be carefully controlled to levels as low as possible

part/ml particles/ml

r respirable fraction

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

us-pel-z2b This standard applies to any operations or sectors for which the Cadmium standard, 1910.1027, is stayed or otherwise not in effect.

Biological limit values						
Country	Name of agent	Parameter	Notation	Identifier	Value	Source
US	cadmium	cadmium		BEI®	5 µg/l	ACGIH® 2019
US	cadmium	creatinine	crea	BEI®	5 µg/g	ACGIH® 2019

Notation

crea creatinine

Relevant DNELs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Sodium sulphate	7757-82-6	DNEL	20 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
Sodium sulphate	7757-82-6	DNEL	20 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
cadmium (non-pyrophoric)	7440-43-9	DNEL	4 µg/m ³	human, inhalatory	worker (industry)	chronic - local effects

Relevant PNECs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
Sodium sulphate	7757-82-6	PNEC	11.09 mg/l	aquatic organisms	freshwater	short-term (single instance)
Sodium sulphate	7757-82-6	PNEC	1.109 mg/l	aquatic organisms	marine water	short-term (single instance)
Sodium sulphate	7757-82-6	PNEC	800 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Sodium sulphate	7757-82-6	PNEC	40.2 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Sodium sulphate	7757-82-6	PNEC	4.02 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Sodium sulphate	7757-82-6	PNEC	1.54 mg/kg	terrestrial organisms	soil	short-term (single instance)
cadmium (non-pyrophoric)	7440-43-9	PNEC	0.19 µg/l	aquatic organisms	freshwater	short-term (single instance)
cadmium (non-pyrophoric)	7440-43-9	PNEC	1.14 µg/l	aquatic organisms	marine water	short-term (single instance)
cadmium (non-pyrophoric)	7440-43-9	PNEC	20 µg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
cadmium (non-pyrophoric)	7440-43-9	PNEC	1.8 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
cadmium (non-pyrophoric)	7440-43-9	PNEC	0.64 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
cadmium (non-pyrophoric)	7440-43-9	PNEC	0.9 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection**- Hand protection**

Wear protective gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

Particulate filter device (EN 143).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Product description Cadmium Foil Packs: Each foil pack contains approximately 0.3 g of solid. Each refill and test kit contains 30 foil packs.

Appearance

Physical state	solid (powder)
Color	blue - metallic
Odor	odorless

Other safety parameters

pH (value)	3.4 (in aqueous solution: 5 wt%, 20 °C)
Melting point/freezing point	not determined
Initial boiling point and boiling range	not determined
Flash point	not applicable
Evaporation rate	Not determined
Flammability (solid, gas)	this material is combustible, but will not ignite readily
Explosion limits of dust clouds	not determined
Vapor pressure	not determined
Density	not determined
Vapor density	this information is not available
Relative density	Information on this property is not available

Solubility(ies)	slightly miscible
- Water solubility	>1,000 mg/l at 25 °C
Partition coefficient	
- n-octanol/water (log KOW)	-2.33
- Soil/water (log KSW)	-0.54
Auto-ignition temperature	375 °C (relative self-ignition temperature for solids)
Viscosity	not relevant (solid matter)
Explosive properties	none
Oxidizing properties	none

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

Hints to prevent fire or explosion

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Toxic if inhaled.

GHS of the United Nations, annex 4: May be harmful if swallowed.

- Acute toxicity estimate (ATE)

Inhalation: dust/mist 0.6557 mg_i/4h

Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	CAS No	Exposure route	ATE
(+)-tartaric acid	87-69-4	oral	≥2,000 mg/kg
Sodium sulphate	7757-82-6	inhalation: dust/mist	2.4 mg _i /4h
cadmium (non-pyrophoric)	7440-43-9	inhalation: dust/mist	0.05 mg _i /4h

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

May cause cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans			
Name of substance	CAS No	Classification	Number
cadmium (non-pyrophoric)	7440-43-9	1	

Legend

1 Carcinogenic to humans

National Toxicology Program (United States): Report on Carcinogens

Name of substance	CAS No	Classification	Number
cadmium (non-pyrophoric)	7440-43-9	Known to be a human carcinogen	1st Report on Carcinogens

29 CFR 1910/1915/1926 Occupational Safety and Health Standards: Toxic and Hazardous Substances (carcinogens)

Name of substance	CAS No	Type of registration
cadmium (non-pyrophoric)	7440-43-9	GI §1910.1027, SE §1915.1027, CI §1926.1127

Legend

CI §1926.1127	Construction Industry (29 CFR 1926.1127)§us_oshacarc_1_2017
GI §1910.1027	General Industry (29 CFR 1910.1027)§us_oshacarc_1_2017
SE §1915.1027	Shipyards Employment (29 CFR 1915.1027)§us_oshacarc_1_2017

Reproductive toxicity

Suspected of damaging the unborn child. Suspected of damaging fertility.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
(+)-tartaric acid	87-69-4	LC50	>100 mg/l	fish	96 h
(+)-tartaric acid	87-69-4	EC50	93.31 mg/l	aquatic invertebrates	48 h
Sodium sulphate	7757-82-6	LC50	7,960 mg/l	fish	96 h
Sodium sulphate	7757-82-6	EC50	3,150 mg/l	aquatic invertebrates	48 h
cadmium (non-pyrophoric)	7440-43-9	LC50	58.16 µg/l	aquatic invertebrates	48 h
cadmium (non-pyrophoric)	7440-43-9	EC50	1,900 µg/l	aquatic invertebrates	24 h
cadmium (non-pyrophoric)	7440-43-9	ErC50	120 µg/l	algae	72 h

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
(+)-tartaric acid	87-69-4	EC50	>1,000 mg/l	microorganisms	3 h
Sodium sulphate	7757-82-6	EC50	1,698 mg/l	aquatic invertebrates	7 d
Sodium sulphate	7757-82-6	LC50	3,030 mg/l	aquatic invertebrates	7 d
cadmium (non-pyrophoric)	7440-43-9	LC50	1,500 µg/l	fish	4 d
cadmium (non-pyrophoric)	7440-43-9	EC50	8.1 µg/l	fish	100 d

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Information on this property is not available.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

please consider the relevant national or regional provisions

SECTION 14: Transport information

14.1 UN number

DOT	UN 3288
IMDG-Code	UN 3288
ICAO-TI	UN 3288

14.2 UN proper shipping name

UN3288, Toxic solid, inorganic, n.o.s., (contains: cadmium (non-pyrophoric)), 6.1, III, environmentally hazardous

DOT	Toxic solid, inorganic, n.o.s.
IMDG-Code	TOXIC SOLID, INORGANIC, N.O.S.

ICAO-TI	Toxic solid, inorganic, n.o.s.
Technical name (hazardous ingredients)	cadmium (non-pyrophoric)
14.3 Transport hazard class(es)	
DOT	6.1
IMDG-Code	6.1
ICAO-TI	6.1
14.4 Packing group	
DOT	III
IMDG-Code	III
ICAO-TI	III
14.5 Environmental hazards	
	hazardous to the aquatic environment
Environmentally hazardous substance (aquatic environment)	cadmium (non-pyrophoric)


14.6 Other relevant information

Shipping container markings and labels, received from CHEMetrics, may vary from the above information. Products that are regulated for transport will be packaged by CHEMetrics as Dangerous Goods in Excepted Quantities according to IATA, US DOT, and IMDG regulations. CHEMetrics may also elect to ship certain products as UN 3316 Chemical Kit, Hazard Class 9, Packing Group II or III. In case of reshipping, it is the responsibility of the shipper to determine appropriate labels and markings in accordance with applicable transportation regulations.


14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.


Information for each of the UN Model Regulations**Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information**

Reportable quantity (RQ)	142.9 lbs (64.86 kg) (cadmium (non-pyrophoric))
Danger label(s)	6.1, fish and tree
	
Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	IB8, IP3, T1, TP33
ERG No	151

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	YES (hazardous to the aquatic environment) (cadmium (non-pyrophoric))
Danger label(s)	6.1, fish and tree
	
Special provisions (SP)	223, 274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
EmS	F-A, S-A

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Environmental hazards	YES (hazardous to the aquatic environment)
Danger label(s)	6.1
	
Special provisions (SP)	A3, A5
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 kg

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations specific for the product in question****National regulations (United States)****Superfund Amendment and Reauthorization Act (SARA TITLE III)**

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings

Name of substance	CAS No	Remarks	Effective date
cadmium (non-pyrophoric)	7440-43-9		1986-12-31

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
cadmium (non-pyrophoric)	7440-43-9	[4]	2	10 (4,54)
cadmium (non-pyrophoric)				

Legend

2 "2" indicates that the source is section 307(a) of the Clean Water Act

[4] No reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is larger than 100 micrometers (0.004 inches).

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
cadmium (non-pyrophoric)	7440-43-9		CA TE F3

Legend

CA Carcinogenic

F3 Flammable - Third Degree

TE Teratogenic

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Proposition 65 List of chemicals			
Name acc. to inventory	CAS No	Remarks	Type of the toxicity
cadmium	7440-43-9		developmental, male
cadmium	7440-43-9		cancer
cadmium	7440-43-9		cancer

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	*	chronic (long-term) health effects may result from repeated overexposure
Health	2	temporary or minor injury may occur
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur

Category	Rating	Description
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National inventories

Country	Inventory	Status
AU	AICS	not all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	not all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
KR	KECI	not all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	not all ingredients are listed
PH	PICCS	not all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	not all ingredients are listed

Legend

AICS	Australian Inventory of Chemical Substances
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory

Legend

TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision**Key literature references and sources for data**

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H402	Harmful to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.